

Historic, Archive Document

Do not assume content reflects current
scientific knowledge, policies, or practices.

292.9
03 Wa



U. S. DEPT. OF AGRICULTURE
NATIONAL AGRICULTURAL LIBRARY

JUN 23 1965

CURRENT SERIAL RECORDS

WATER SUPPLY OUTLOOK
and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS
for
UTAH

UNITED STATES DEPARTMENT of AGRICULTURE--SOIL CONSERVATION SERVICE.
and
STATE ENGINEER of UTAH

In cooperation with U.S. Forest Service, Bureau of Reclamation,
Utah Fish and Game Dept., Utah Agricultural Experiment Station,
U.S. National Park Service, U.S. Geological Survey; and other
Federal, State, and private organizations.

||||||| AS OF |||||
JUNE 1, 1965

UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

To Recipients of Water Supply Outlook Reports:

The climate of the cultivated and populated areas of the West is characterized by relatively dry summer months. Such precipitation as occurs falls mostly in the winter and early spring months when it is of little immediate benefit to growing crops. Most of this precipitation falls as mountain snow which stays on the ground for months, melting later to sustain streamflow during the period of greatest demand during late spring and summer. Thus, nature provides in mountain snow an imposing water storage facility.

The amount of water stored in mountain snow varies from place to place as well as from year to year and accordingly, so does the runoff of the streams. The best seasonal management of variable western water supplies results from advance estimates of the streamflow.

A snow survey consists of a series of about ten samples taken with specially designed snow sampling equipment along a permanently marked line, up to 1000 feet in length, called a snow course. The use of snow sampling equipment provides snow depth and water equivalent values for each sampling point. The average of these values is reported as the snow survey measurement for a snow course.

Snow surveys are made monthly or semi-monthly beginning in January or February and continue through the snow season until April, May or June. Currently more than 1400 western snow courses are measured each year. These measurements furnish the key data for water supply forecasts.

Streamflow forecasts are obtained by a comparison of total or maximum snow accumulation, as measured by snow water equivalent, to the subsequent spring and summer or snowmelt season runoff over a period of years. The snow water equivalent measured in selected snow courses provides most of the index to the streamflow forecast for the following season. More accurate forecasts are usually obtained when other factors such as soil moisture, base flow and spring precipitation are considered and included in the forecast procedure. Early season forecasts assume average climatic conditions through the snowmelt season.

Listed below are the Federal-State-Private Cooperative Snow Survey and Water Supply Forecast reports available for the West which contain detailed information on snow survey measurements, streamflow forecasts, reservoir storage, soil moisture and other guide data to water management and conservation decisions. Soil Conservation Service Reports may be secured from Soil Conservation Service, 511 N.W. Broadway - Room 507, Portland, Oregon 97209.

PUBLISHED BY SOIL CONSERVATION SERVICE

<u>REPORTS</u>	<u>ISSUED</u>	<u>LOCATION</u>	<u>COOPERATING WITH</u>
RIVER BASINS			
WESTERN UNITED STATES _____	MONTHLY (FEB.-MAY) _____	PORTLAND, OREGON _____	ALL COOPERATORS
BASIC DATA SUMMARY _____	OCTOBER 1 _____	PORTLAND, OREGON _____	ALL COOPERATORS
STATES			
ALASKA _____	MONTHLY (MAR.-MAY) _____	PALMER, ALASKA _____	ALASKA S.C.D.
ARIZONA _____	SEMI-MONTHLY (JAN.15 - APR.1)	PHOENIX, ARIZONA _____	SALT R. VALLEY WATER USERS ASSOC. ARIZ. AGR. EXP. STATION
COLORADO AND NEW MEXICO _____	MONTHLY (FEB.-MAY) _____	FORT COLLINS, COLORADO _____	COLO. STATE UNIVERSITY COLO. STATE ENGINEER N. MEX. STATE ENGINEER
IDAHO _____	MONTHLY (JAN.-JUNE) _____	BOISE, IDAHO _____	IDAHO STATE RECLAMATION ENGINEER
MONTANA _____	MONTHLY (JAN.-JUNE) _____	BOZEMAN, MONTANA _____	MONT. AGR. EXP. STATION
NEVADA _____	MONTHLY (JAN.-MAY) _____	RENO, NEVADA _____	NEVADA DEPT. OF CONSERVATION AND NATURAL RESOURCES - DIVISION OF WATER RESOURCES
OREGON _____	MONTHLY (JAN.-JUNE) _____	PORTLAND, OREGON _____	OREG. STATE UNIVERSITY OREGON STATE ENGINEER
UTAH _____	MONTHLY (JAN.-JUNE) _____	SALT LAKE CITY, UTAH _____	UTAH STATE ENGINEER
WASHINGTON _____	MONTHLY (FEB.-JUNE) _____	SPOKANE, WASHINGTON _____	WN. STATE DEPT. OF CONSERVATION
WYOMING _____	MONTHLY (FEB.-JUNE) _____	CASPER, WYOMING _____	WYOMING STATE ENGINEER

PUBLISHED BY OTHER AGENCIES

<u>REPORTS</u>	<u>ISSUED</u>	<u>AGENCY</u>
BRITISH COLUMBIA _____	MONTHLY (FEB.-JUNE) _____	WATER RESOURCES SERVICE, DEPT. OF LANDS, FOREST AND WATER RESOURCES, PARLIAMENT BLDG., VICTORIA, B.C., CANADA
CALIFORNIA _____	MONTHLY (FEB.-MAY) _____	CALIF. DEPT. OF WATER RESOURCES, P.O. Box 388, SACRAMENTO, CALIF.

WATER SUPPLY OUTLOOK
and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS
for
UTAH

JUNE 1, 1965

Report prepared by

GREGORY L. PEARSON - GARRY DINSDALE

and

Patricia Paramore

SOIL CONSERVATION SERVICE
SNOW SURVEY SECTION
FEDERAL BLDG., ROOM 4012
SALT LAKE CITY UTAH 84111

Issued by

WAYNE D. CRIDDLE

STATE ENGINEER
STATE OF UTAH
SALT LAKE CITY, UTAH

J.A. LIBBY

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
SALT LAKE CITY, UTAH

DR. D.W. THORNE

DIRECTOR
UTAH AGRICULTURAL
EXPERIMENT STATION
LOGAN, UTAH

WATER SUPPLY OUTLOOK

as of

JUNE 4, 1965

and

Special Measurements
During 1964-65 Season

Forecasts of streamflow to come from northern Utah watersheds (Utah Lake drainages northward to the Idaho line) remain essentially the same as expected a month ago. In the Uintah Basin, where precipitation in the mountains during May ranged from about 110% to 160% of average, forecasts are now up 3% to 5% above those of May 1st.

In most central and southern areas, forecasts increased by 5% to 20% as a result of mountain precipitation which ranged from about 140% to 270% of average for May. The principle exception to this general picture was on the Sevier river above Hatch, where May precipitation on the main water producing area ranged from about 70% to 95% of average. Forecasts here are down 2% to 5% from last month.

A month ago the poorest streamflow prospects in the southwestern part of the state was for the streams from Beaver to Fillmore, where essentially average flow was expected. Now, these streams are expected to yield from about 120% to 135% of average.

Snowmelt conditions during the month continued below average. The result is that the June 1st snowpack at the higher elevations is exceptionally heavy in all parts of the state. In the past very few snow surveys have been made this time of year, since most of the winter's snowpack has melted by this time. However, several comparisons will illustrate just how heavy the present high elevation snowpack is.

At Trial Lake (elevation 9800 ft) near the head of the Provo, Weber, Duchesne and Bear rivers, this month's survey found 71 inches of snow containing 40.9 inches water. The water content reported in some previous years was as follows: 19.5 inches in 1964; 25.4 in 1962; 31.8 in 1957; 21.4 in 1952.

On the Logan river the Steep Hollow #1 snow course (elevation 8500 ft.) had 79 inches snow with 41.0 inches water. The water content last year was 25.0, while in 1963 it was 9.2 inches.

On Ephraim Creek in Sanpete County, the G.B.R.C. Meadows snow course (elevation 10,000 ft.) had 70 inches snow containing 33.5 inches water. Last year the water content was 16.9 inches, in 1963 it was 11.1 inches. This year's reading is a little more than the 32.1 inches snow water measured in the heavy runoff year of 1957.



WATER SUPPLY OUTLOOK (continued)

At Farnsworth Lake (elevation 9900 ft.) on Salina Creek, at the north end of the mountains near Fish Lake, the survey found 61 inches snow containing 25.9 inches water. In 1957 the previous high reading was 19.7 inches water.

Because of the delayed snowmelt which has produced this heavy snowpack, the streams which ordinarily reach their peaks during the time the high elevation snows melt, can be expected to reach much higher flows than would have been the case with normal April and May temperatures. This includes the Logan river, the upper Bear, Weber and Provo rivers, and other streams coming from the Uinta mountains eastward to Vernal. Also included are streams in Sanpete, Sevier and Emery counties, where streams will reach peaks comparable to 1957 flows.

The maximum mean daily flow (average flow for 24 hours on the day of greatest flow) of the Weber at Oakley can be expected to be about 2,000 to 2,500 cfs. This compares with 2,320 cfs in 1957, 2,110 cfs in 1953 and 2,040 cfs in 1952. The momentary peak flow is generally 10% to 20% higher than the maximum mean daily flow. Flow of other high elevation streams coming from the Uintah Mountains will be comparable.

Peak flow from most of the high elevation streams can be expected to occur during the first 10 days to two weeks of June. Cool temperatures during this time could delay the high water period until near the 20th of the month.

Because of the delayed snowmelt, streamflow should hold up exceptionally well into late summer months, providing excellent water supplies for crops requiring late season water.

SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE ^a

2 years ago

GREAT BASIN DRAINAGE

JUNE 1, 1965UPPER BEAR RIVER
(Above Harer, Idaho)

Hayden Fork	10J7	9300	5/26	24	10.6	- -	- -
Monte Cristo R.S.	11H12	8960	5/28	39	18.9	7.9	2.8
Stillwater Camp	10J17	8550	5/26	0	0.0	0.0	0.0
Trial Lake x	10J8	9800	5/28	71	40.9	19.5	18.1

LOWER BEAR RIVER
(Below Harer, Idaho)

Dry Bread Pond x	11H13	8230	5/28	8	4.2	0.0	0.0
Garden City Summit	11H7	7600	5/26	17	8.1	0.0	0.0
Klondike Narrows	11H1	7400	5/26	1	0.2	0.0	0.0
Monte Cristo R.S.	11H12	8960	5/28	39	18.9	7.9	2.8
Steep Hollow #1	11H27	8500	5/26	79	41.0	25.0	9.2
Steep Hollow #2	11H28	7700	5/26	33	16.7	3.3	0.0

OGDEN RIVER

Dry Bread Pond	11H13	8230	5/28	8	4.2	0.0	0.0
Monte Cristo R.S.	11H12	8960	5/28	39	18.9	7.9	2.8

WEBER RIVER

Chalk Creek #1	11J1	9100	5/27	57	26.3	7.3	- -
Chalk Creek #2	11J2	8000	5/27	8	3.2	0.0	- -
Chalk Creek #3	11J3	7500	5/27	0	0.0	0.0	- -
Farmington Canyon(upper)	11J11	8000	5/27	35	17.9	- -	- -
Parley's Canyon Smt.	11J15	7500	5/29	0	0.0	0.0	0.0
Smith & Morehouse	11J4	7600	5/28	0	0.0	0.0	0.0
Trial Lake x	10J8	9800	5/28	71	40.9	19.5	18.1

PROVO RIVER & UTAH LAKE

Clear Creek Ridge #2	11K22	8000	5/26	0	0.0	0.0	0.0
Daniels-Strawberry Smt.	11J23	8000	5/27	0	0.0	0.0	0.0
Dutchman R. S.	11J17	7500	6/1	0	0.0	0.0	0.0
Hobble Creek Summit	11J22	7300	5/28	0	0.0	0.0	0.0
Payson R. S.	11K1	8050	5/26	1	0.2	0.0	0.0
Soapstone R. S.	11J25	7800	5/28	0	0.0	0.0	0.0
Timpanogos Divide	11J21	8140	6/1	0	0.0	0.0	0.0
Trial Lake	10J8	9800	5/28	71	40.9	19.5	18.1

(a) 1948-62, 15 year period. (b) Average of all past record. (x) Adjacent drainage. (A) Aerial observation: Water content estimated. * Estimated 1948-62, 15 year average.

SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE ^a

UPPER SEVIER RIVER
(South of Richfield, Utah)

Big Flat x	12L7	10290	5/26	65	23.7	11.5	6.5
Box Creek	12L4	9800	5/28	15	5.2	0.0	0.0
Cedar Breaks	12M1	10390	5/24	59	24.2	4.0	0.0
Duck Creek R.S.	12M4	8560	5/28	0	0.0	0.0	0.0
Midway Valley	12M2	9800	5/27	58	23.1	3.6	- -

LOWER SEVIER RIVER
(Including San Pitch River)

Beaver Dams	11K13	8000	5/25	0	0.0	0.0	0.0
Farnsworth Lake	11L1	9900	5/27	61	25.9	11.6	- -
G.B.R.C. Headquarters	11K11	8700	5/28	24	11.2	- -	- -
G.B.R.C. Meadows	11K10	10000	5/28	70	33.5	16.9	11.1
Gooseberry R. S.	11L2	8400	5/27	5	2.2	0.0	- -
Gooseberry Reservoir x	11K4	8700	5/26	20	8.8	1.3	- -
Mammoth R.S.-Ctnwd.Crk.	11K3	8800	5/26	20	9.1	2.6	- -
Mt. Baldy R.S.	11K12	9500	5/25	68	30.3	13.6	9.0
Pickle Keg Springs	11K39	9600	6/1	5	2.5	0.0	- -
Pine Creek	12L1	8700	5/27	13	4.2	0.0	- -
Shingle Mill	12L11	6200	5/27	0	0.0	0.0	0.0

BEAVER RIVER

Big Flat	12L7	10000	5/26	65	23.7	11.5	6.5
Merchant's Valley	12L9	8200	5/26	6	2.0	0.0	- -
Otter Lake	12L8	9300	5/26	44	15.6	3.1	---

PAROWAN CREEK

Ed Ward Flat	12M12	8300	5/24	0	0.0	0.0	0.0
Yankee Reservoir	12M11	8700	5/24	2	0.5	0.0	0.0

COAL CREEK

Cedar Breaks	12M1	10390	5/24	59	24.2	4.0	0.0
Midway Valley x	12M2	9800	5/27	58	23.1	3.6	- -
Webster Flat	12M3	9200	5/27	28	10.2	0.0	0.0

(a) 1948-62, 15 year period. (b) Average of all past record. (x) Adjacent drainage. (A) Aerial observation; Water content estimated. * Estimated 1948-62, 15 year average.



SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE ^a

COLORADO RIVER DRAINAGE

UPPER GREEN RIVER IN UTAH

(Tributaries above Flaming Gorge)

Black's Fork Jct.	10J22	8925	5/25	7	2.4	0.0	0.0
E.Fk.Black's Fk.G.S.	10J21	9300	5/25	14	4.6	0.0	0.0
Hewinta Guard Station	10J4	9500	5/25	25	9.4	0.0	0.0
Spirit Lake	9J7	10300	5/24	45	16.9	4.9	0.0

GREEN RIVER TRIBUTARIES BETWEEN
FLAMING GORGE & DUCHESNE RIVER

Kings Cabin(upper)	9J1	8730	5/24	0	0.0	0.0	0.0
--------------------	-----	------	------	---	-----	-----	-----

DUCHESNE RIVER

Daniels-Strawberry Smt.x	11J23	8000	5/27	0	0.0	0.0	0.0
Indian Canyon	10K1	9100	5/27	20	9.6	0.0	0.0
Julius Park	9J6	9800	5/25	26	9.6	0.0	0.0
Lakefork Mountain	10J10	10500	5/26	34	12.2	1.3	0.0
Mosby Mountain	9J5	9500	5/25	25	8.4	0.0	0.0
Paradise Park	9J3	10100	5/25	32	11.0	0.7	0.2
Trial Lake x	10J8	9800	5/28	71	40.9	19.5	18.1
White River #1x	10K2	8600	5/27	0	0.0	0.0	0.0

PRICE RIVER

Gooseberry Reservoir	11K4	8700	5/26	20	8.8	1.3	- -
Indian Canyon x	10K1	9100	5/27	20	9.6	0.0	0.0
Mammoth R.S.-Ctnwd.Crk.x	11K3	8800	5/26	20	9.1	2.6	- -
Mud Creek #2	11K33	8300	5/27	0	0.0	0.0	0.0
Timberline	10K6	9100	5/28	0	0.0	0.0	0.0
White River #1	10K2	8600	5/27	0	0.0	0.0	0.0

SAN RAFAEL RIVER

Buck Flat	11K31	9400	5/26	39	15.9	1.8	- -
Gooseberry Reservoir	11K4	8700	5/26	20	8.8	1.3	- -
Mammoth R.S.-Ctnwd. Crk.x	11K3	8800	5/26	20	9.1	2.6	- -
Red Pine Ridge	11K28	9400	5/27	28	12.6	0.0	- -
Rush Pond	11K38	9800	5/26	35	14.1	- -	- -
Seely Creek R.S.	11K9	10000	5/28	53	20.9	3.4	- -

MUDDY RIVER

Mt. Baldy R.S. x	11K12	9500	5/25	68	30.3	13.6	9.0
------------------	-------	------	------	----	------	------	-----

(a) 1948-62, 15 year period. (b) Average of all past record. (x) Adjacent drainage. (A) Aerial observation: Water content estimated. * Estimated 1948-62, 15 year average.

SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE ^a

FREMONT RIVER

Black's Flat-U.M. Crk.	11L4	9250	5/27	8	2.2	0.0	0.0
Farnsworth Lake x	11L1	9900	5/27	61	25.9	11.6	- -
Fish Lake	11L3	8700	5/27	0	0.0	0.0	0.0

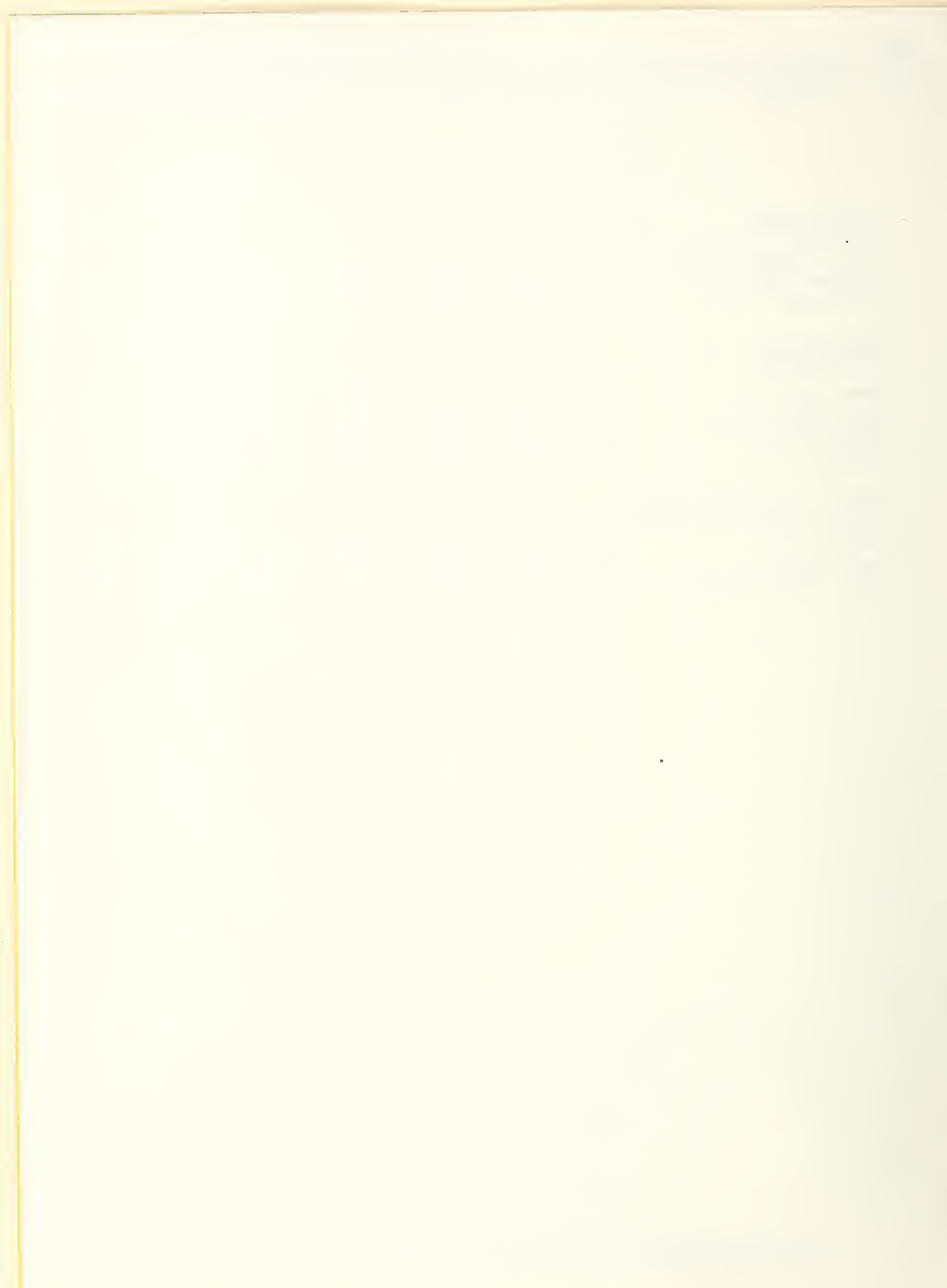
VIRGIN RIVER

Cedar Breaks x	12M1	10390	5/24	59	24.2	4.0	0.0
Duck Creek R.S.	12M4	8560	5/28	0	0.0	0.0	0.0
Midway Valley x	12M2	9800	5/27	58	23.1	3.6	- -
Webster Flat	12M3	9200	5/27	28	10.2	0.0	0.0

SOUTHEASTERN UTAH DRAINAGES

Buckboard Flat	9M1	9000	5/28	Trace	Trace	0.0	0.0
Camp Jackson	9M2	8600	5/28	0	0.0	0.0	0.0
LaSal Mountain(upper)	9L2	9600	6/2	0	0.0	0.0	0.0

(a) 1948-62, 15 year period. (b) Average of all past record. (x) Adjacent drainage. (A) Aerial observation; Water content estimated. * Estimated 1948-62, 15 year average.



SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE ^a

2 years
agoSUPPLEMENTAL MEASUREMENTS FOR UTAHDECEMBER 1, 1964

Beaver Creek-Skunk Crk.	11H14	7150	11/27	14	4.0	1.0	- -
Ben Lomond(lower)	11H9	5850	11/27	16	4.4	2.5	0.0
Ben Lomond Trail	11H30	6000	11/27	18	5.0	- -	---
Big Flat	12L7	10290	11/27	16	3.8	0.0	0.0
Bryce Canyon	12M8	8000	11/27	9	0.9	- -	- -
Buckboard Flat	9M1	9000	11/23	18	4.2	- -	- -
Buck Flat	11K31	9400	12/3	32	6.8	1.2	0.0
Camp Jackson	9M2	8600	11/23	12	2.5	- -	- -
Dry Bread Pond	11H13	8230	12/1	23	4.5	1.8	1.3
Dry Valley Divide	11K8	7800	11/30	14	3.6	- -	- -
Dutchman R.S.	11J17	7500	11/30	17	4.2	- -	- -
East Portal	11J7	7560	11/30	15	3.2	- -	- -
Farnsworth Lake	11L1	9900	11/24	21	4.9	- -	- -
Garden City Summit	11H7	7600	11/25	12	2.3	3.2	- -
G.B.R.C. Headquarters	11K11	8700	11/30	23	5.2	- -	- -
G.B.R.C. Meadows	11K10	10000	11/30	30	7.0	- -	- -
Horse Ridge	11H21	8260	11/30	26	6.1	1.7	- -
Jones Meadow	11K7	7600	11/30	13	3.2	- -	- -
Kilfore Creek	11H31	7300	11/30	14	3.7	1.1	- -
LaSal Mountain	9L1	8800	11/24	8	1.4	- -	- -
LaSal Mountain(upper)	9L2	9600	11/24	13	3.1	- -	- -
Long Flat	13M2	8000	11/24	12	2.9	- -	- -
Mammoth R.S.-Ctnwd. Crk.	11K3	8800	11/27	23	4.8	- -	- -
Merchant Valley	12L9	8200	11/27	9	1.9	- -	- -
Midway Valley	12M2	9800	11/25	22	5.5	- -	- -
Monte Cristo R. S.	11H12	8960	12/1	32	7.7	- -	- -
Mud Creek	11K33	8300	11/30	22	4.9	- -	- -
Pine Creek	12L1	8700	11/30	16	4.6	2.0	1.3
Red Pine Ridge	11K28	9400	12/2	29	6.4	1.0	0.0
Rush Pond	11K38	9800	12/3	25	5.4	- -	- -
Shingle Mill	12L11	6200	11/27	15	3.5	1.5	0.8
Stuart R.S.	11K27	7950	12/4	21	4.2	0.0	0.0
Strawberry Divide	11J8	8000	11/30	26	5.9	- -	- -
Timpanogos Divide	11J21	8140	11/30	28	8.1	- -	- -
Tony Grove R.S.	11H3	6250	11/25	7	1.1	- -	- -
Upper Joe's Valley	11K29	8800	12/2	22	4.1	- -	- -
White River #1	10K2	8600	12/1	18	4.4	- -	- -
White River #2	11K24	7600	12/1	14	3.2	- -	- -
White River #3	11K25	7400	12/1	13	3.2	- -	- -
Webster Flat	12M3	9200	11/25	13	2.8	- -	- -
Wrigley Creek	11K32	9000	12/3	20	4.1	- -	- -
Yankee Reservoir	12M11	8700	11/23	11	2.0	- -	- -

(a) 1948-62, 15 year period. (b) Average of all past record. (x) Adjacent drainage. (A) Aerial observation: Water content estimated. * Estimated 1948-62, 15 year average.



SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
NAME	NO.	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
						LAST YEAR	AVERAGE ^a

JANUARY 15, 1965

Whitney R. S.	10J28	9300	1/14	47	14.9	- -	- -
---------------	-------	------	------	----	------	-----	-----

FEBRUARY 1, 1965

Pickle Keg Springs	11K39	9600	2/1	44	13.1	- -	- -
Salina Creek (lower)	11L8	7250	2/1	14	4.2	- -	- -
White Gate	11L7	9350	2/1	36	10.5	- -	- -
Kimberly Mine	12L6	8900	1/28	38	10.5	- -	- -
Stuart R.S.	11K27	7950	1/30	38	10.6	- -	- -

MAY 15, 1965

Whitney R.S.	10J28	9300	5/18	32	16.0	- -	- -
--------------	-------	------	------	----	------	-----	-----

(a) 1943-57, 15 year period. (b) Average of all past record. (x) Adjacent drainage. (A) Aerial observation: Water content estimated. * Estimated 1943-57, 15 year average.



PRECIPITATION DATA (Inches)

DRAINAGE BASIN AND RAIN GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. 10/1 TO DATE		
		DATE OF READING	MONTH'S PRECIPITATION	1948 - 62 AVERAGE	THIS YEAR	1948 - 62 AVERAGE	PERCENT OF AVERAGE

GREAT BASIN DRAINAGE

UPPER BEAR RIVER (Above Harer, Idaho)

Burts-Miller Ranch	7900	5/26	4.13	- -	- -	- -	- -
Chalk Creek #2*	8000	5/27	3.45	2.35	27.05	21.30	127
Chalk Creek #3*	7500	5/27	3.05	- -	22.83	- -	- -
Hayden Fork	9300	5/26	- -	- -	41.68	- -	- -
Monte Cristo #2	8960	5/28	3.50	3.10	40.43	36.25	112
Salt River Summit	7900			2.30		22.80	
Stillwater Camp	8550	5/26	4.95	1.80	22.83	16.45	139
Trial Lake*	9800	5/28	3.20	2.70	37.83	29.90	127

LOWER BEAR RIVER (Below Harer, Idaho)

Dry Bread Pond	8230	5/28	3.64	2.80	35.78	27.85	128
Garden City Summit	7600	5/26	2.54	2.65	34.22	24.25	141
Klondike Narrows	7400	5/26	1.93	3.30	40.38	30.00	135
Little Bear (upper)	6850	5/28	2.76	2.60	30.71	24.70	124
Monte Cristo #2	8960	5/28	3.50	3.10	40.43	36.25	112
Tony Grove R. S. (SCS)	6250	5/26	1.69	- -	31.64	- -	- -
Willow Flat	6100	5/28	2.05	3.10	- -	30.80	- -

OGDEN RIVER

Nen Lomond (lower)	5850	Gage Molested		3.25	- -	32.50	- -
Ben Lomond Trail	6000	5/28	1.95	3.40	40.57	34.10	119
Causey Dam	5500	5/28	1.36	- -	20.47	- -	- -
Dry Bread Pond	8230	5/28	3.64	2.80	35.78	27.85	128
Horse Ridge	8260	Delayed Report		- -	- -	- -	- -
Monte Cristo #2*	8960	5/28	3.50	3.10	40.43	36.25	112
Sagebrush Flat	6300	5/28	1.58	1.85	- -	18.70	- -

WEBER RIVER

Chalk Creek #1	9100	5/27	4.27	- -	- -	- -	- -
Chalk Creek #2	8000	5/27	3.45	2.35	27.05	21.30	127
Chalk Creek #3	7500	5/27	3.05	- -	22.83	- -	- -
Farmington Guard Sta. (1)	7500	6/1	3.92	3.95	39.75	38.35	104
Farmington Rice (1)	7000	6/1	4.10	3.75a	36.90	35.68a	103
Horse Ridge	8260	Delayed Report		- -	- -	- -	- -
Lost Creek Reservoir	6125	6/1	2.55	- -	20.02	- -	- -
Mt. Dell Dam (2)*	5500	5/31	1.96	2.22a	23.22	17.86a	130
Parley's Canyon Smt.	7500	5/29	3.58	2.70	35.78	27.00	133
Redden Mine (upper)	9000	Delayed Report		- -	- -	- -	- -
Silver Lake (Brighton) (2)*	8725	5/31	2.44	3.01a	40.13	36.00a	111
Smith & Morehouse	7600	5/28	2.65	2.55	28.94	23.75	122
Trial Lake*	9800	5/28	3.20	2.70	37.83	29.90	127

(1) Data supplied by U.S. Forest Service. (2) Data supplied by U.S. Weather Bureau. a - all values estimated except those where symbol "a" occurs. *Adjacent drainage.

PRECIPITATION DATA (Inches)

DRAINAGE BASIN AND RAIN GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. 10/1 TO DATE		
		DATE OF READING	MONTH'S PRECIPITATION	1948 - 62 AVERAGE	THIS YEAR	1948 - 62 AVERAGE	PERCENT OF AVERAGE

PROVO RIVER & UTAH LAKE

Clear Creek Ridge #2	8000	5/26	2.25	2.10	24.46	21.10	116
Daniels-Strawberry Smt.	8000	5/27	2.25	2.20	27.32	23.40	117
Dutchman R. S.	7500	6/1	2.37	2.36	31.14	31.81	98
East Portal Ridge	7800	5/31	2.80	- -	26.46	- -	- -
Hobble Creek Smt.	7300	5/28	2.10	2.35	25.10	22.55	111
Payson R. S.	8050	5/26	2.58	2.35	27.90	23.25	120
Soapstone R. S.	7800	5/28	1.90	2.30	25.36	21.00	121
Strawberry Res.-E. Portal	7606	5/31	1.80	1.48a	15.20	13.44a	113
Timpanogos Divide	8200	5/27	2.70	2.36a	33.53	31.81a	105
Trial Lake	9800	5/28	3.20	2.70	37.83	29.90	127

JORDAN RIVER & TOOELE VALLEY

Middle Canyon	7000	5/27	3.48	2.40	29.96	22.70	132
Mt. Dell Dam (2)	5500	5/31	1.96	2.22a	23.22	17.86a	130
Parley's Canyon Smt.	7500	5/29	3.58	2.70	35.78	27.00	133
Silver Lake(Brighton)(2)	8725	5/31	2.44	3.01a	40.13	36.00a	111

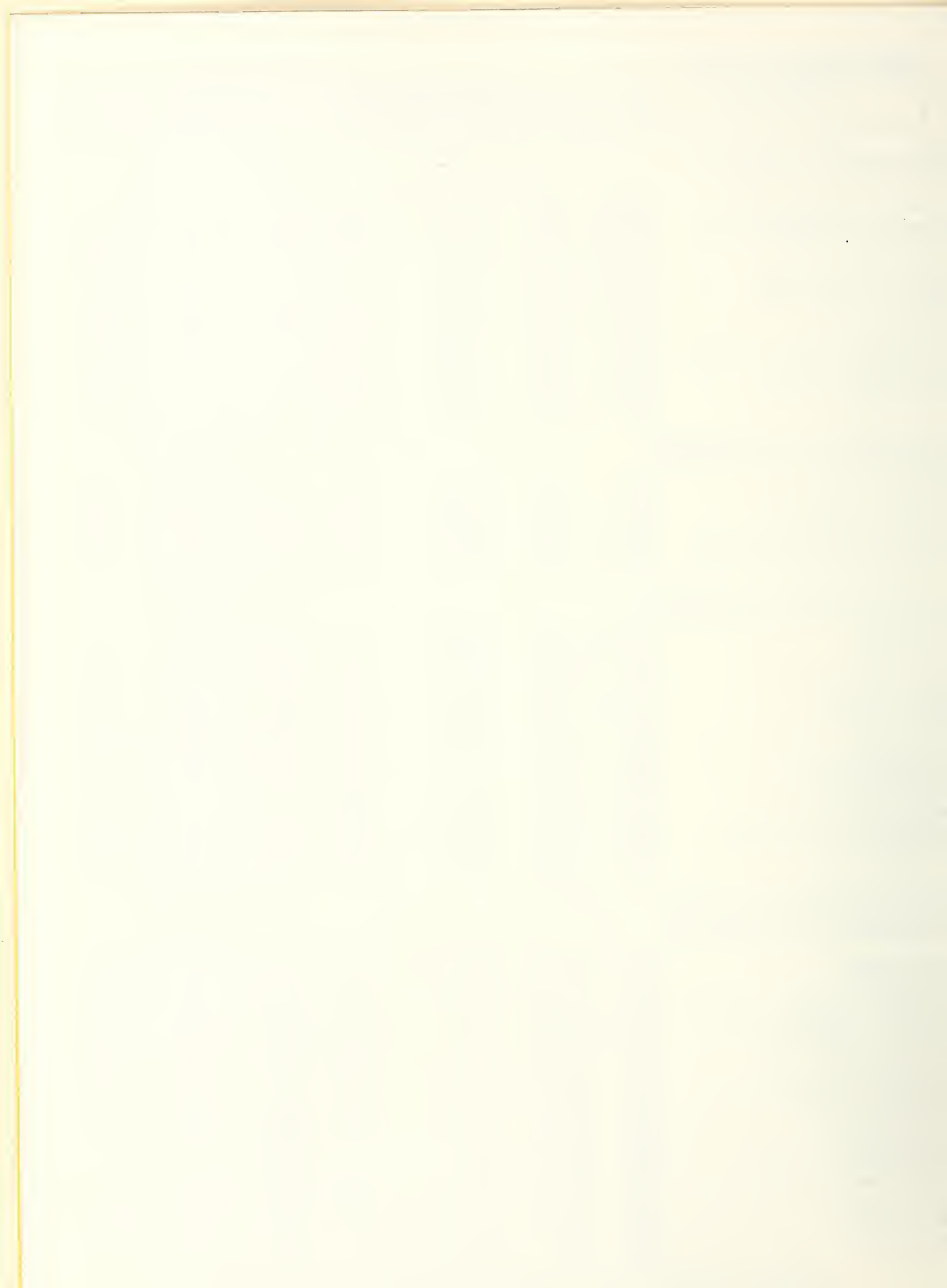
SEVIER RIVER ABOVE RICHFIELD

Big Flat*	10290	5/26	4.40	2.45	28.38	24.30	117
Box Creek	9800	5/28	2.87	1.85	22.62	17.25	131
Castle Valley	9700	5/24	2.11	2.35	23.80	21.55	110
Cedar Breaks	10390	5/24	2.95	3.10	29.52	28.25	104
Duck Creek R.S.	8560	5/28	1.77	2.60	26.92	25.00	108
Fish Lake	8700	5/27	2.83	1.47	15.68	10.43	150
Kimberly Mine	8900	5/26	- -	2.40	29.77	23.80	125
Panguitch Lake	8200	5/24	2.12	1.05	- -	9.70	- -
Webster Flat*	9200	5/27	3.96	3.00	33.93	27.00	126
Widtsoe-Escalante #3	9500	5/25	3.08	1.80	23.34	16.40	142
Widtsoe R.S.	7600	5/25	2.00	0.75a	8.10	6.73a	120

SEVIER RIVER BELOW RICHFIELD (Including San Pitch River)

Beaver Dams	8000	5/25	3.91	2.10	22.97	19.80	116
Farnsworth Lake	9900	5/27	6.38	2.45	35.25	24.25	145
G.B.R.C. Headquarters(1)	8700	5/28	5.30	2.52a	30.98	24.97a	124
G.B.R.C. Meadows (1)	10000	5/28	6.14	2.77a	37.03	27.59a	134
G.B.R.C. Oaks (1)	7655	5/28	3.93	1.85a	20.60	17.37a	119
Gooseberry R.S. (1)	7800	5/27	4.31	1.90	25.42	17.00	150
Gooseberry Reservoir*	8700	5/26	2.95	2.40	28.73	24.00	120
Mammoth R.S. #2*	8600	5/26	2.77	2.35	29.59	23.80	124
Mt. Baldy R.S.	9500	5/25	4.80	- -	29.85	- -	- -
Pickle Keg Springs	9600	6/1	4.61	- -	23.87	- -	- -
Pine Creek	8700	5/27	7.10	3.00	34.47	30.40	113
Salina Creek (lower)	7250	6/1	3.03	- -	13.56	- -	- -
Shingle Mill	6200	5/27	4.85	2.15	23.21	19.65	118
White Gate	9350	6/1	3.75	- -	17.31	- -	- -

(1) Data supplied by U.S. Forest Service. (2) Data supplied by U.S. Weather Bureau. a - all values estimated except those where symbol "a" occurs. *Adjacent drainage.



PRECIPITATION DATA (Inches)

DRAINAGE BASIN AND RAIN GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. 10/1 TO DATE		
		DATE OF READING	MONTH'S PRECIPITATION	1948 - 62 AVERAGE	THIS YEAR	1948 - 62 AVERAGE	PERCENT OF AVERAGE

BEAVER RIVER

Beaver Canyon P.H. (2)	7275	5/31	3.58	1.39a	14.23	13.58a	105
Big Flat	10290	5/26	4.40	2.45	28.38	24.30	117

PAROWAN CREEK

Yankee Reservoir	8700	5/24	2.73	1.70	21.15	15.30	138
------------------	------	------	------	------	-------	-------	-----

COAL CREEK

Cedar Breaks	10390	5/24	2.95	3.10	29.52	28.25	104
Webster Flat*	9200	5/27	3.96	3.00	33.93	27.00	126

ENTERPRISE TO NEW HARMONY DRAINAGE

Little Grassy Creek	6100	5/25	0.45	1.35	18.85	15.25	124
Long Flat	8000	5/28	4.73	1.65	23.93	17.95	133

COLORADO RIVER DRAINAGE

UPPER GREEN RIVER IN UTAH (Tributaries above Flaming Gorge)

Black's Fork Jct.	8925	5/25	4.87	- -	24.17	- -	- -
Burnt Creek	7900	5/28	6.66	- -	18.53	- -	- -
E.Fk. Black's Fk. G.S.	9300	5/25	5.20	- -	22.50	- -	- -
Hewinta G.S.	9500	5/25	6.08	- -	25.18	- -	- -
Spirit Lake	10300	5/25	7.26	- -	26.51	- -	- -

GREEN RIVER TRIBUTARIES BETWEEN FLAMING GORGE & DUCHESNE RIVER

Grizzly Ridge	8500	5/28	4.21	- -	21.59	- -	- -
King's Cabin (upper)	8730	5/24	3.31	1.85	18.84	16.80	112

DUCHESNE RIVER

Currant Creek	7800	5/28	1.69	1.50	19.26	16.60	116
Daniels-Strawberry Smt.*	8000	5/27	2.25	2.20	27.32	23.40	117
East Portal Ridge*	7800	5/31	2.80	- -	26.46	- -	- -
Indian Canyon	9100	5/27	2.80	2.15	24.79	19.50	127
Julius Park	9800	5/25	3.05	2.10	20.66	19.00	109
Lakefork Mountain	10500	5/26	2.99	1.85	22.99	17.65	130
Moon Lake	8150	5/31	1.75	1.58a	13.90	10.92a	127
Mosby Mountain	9500	5/25	3.30	- -	20.29	- -	- -
Paradise Park	10100	5/25	3.24	2.30	22.67	20.40	111
Rock Creek	7900	5/27	1.82	1.45	18.45	14.95	123
Soapstone R.S.*	7800	5/28	1.90	2.30	25.36	21.00	121

(1) Data supplied by U.S. Forest Service. (2) Data supplied by U.S. Weather Bureau. a - all values estimated except those where symbol "a" occurs. *Adjacent drainage.

PRECIPITATION DATA (Inches)

DRAINAGE BASIN AND RAIN GAGE LOCATION	ELEVATION	CURRENT INFORMATION			FROM APPROX. 10/1 TO DATE		
		DATE OF READING	MONTH'S PRECIPITATION	1948 - 62 AVERAGE	THIS YEAR	1948 - 62 AVERAGE	PERCENT OF AVERAGE

DUCHESNE RIVER - Continued

Strawberry Res.- E.Portals*	7606	5/31	1.80	1.48a	15.20	13.44a	113
Trial Lake	9800	5/28	3.20	2.70	37.83	29.90	127
White River #1*	8600	5/27	1.95	2.25	22.15	20.50	108

PRICE RIVER

Clear Creek Ridge #2*	8000	5/26	2.25	2.10	24.46	21.10	116
Gooseberry Reservoir	8700	5/26	2.95	2.40	28.73	24.00	120
Indian Canyon	9100	5/27	2.80	2.15	24.79	19.50	127
Mammoth R.S. #2	8600	5/26	2.77	2.35	29.59	23.80	124
Mud Creek	8300	5/27	3.00	1.75	28.20	19.85	142
White River #1	8600	5/27	1.95	2.25	22.15	20.50	108

SAN RAFAEL RIVER

Buck Flat	9400	5/26	4.30	2.25	30.90	22.50	137
G.B.R.C. Meadows*(1)	10000	5/28	6.14	2.77	37.03	27.59	134
Gooseberry Reservoir*	8700	5/26	2.95	2.40	28.73	24.00	120
Red Pine Ridge	9400	5/27	3.75	2.70	34.25	26.90	127
Stuart R. S.	7950	5/28	2.90	1.70	23.15	17.00	136

MUDDY RIVER

Mt. Baldy R. S.*	9500	5/25	4.80	- -	29.85	- -	- -
------------------	------	------	------	-----	-------	-----	-----

FREMONT & ESCALANTE RIVERS

Black's Flat-U.M. Creek	9250	5/27	3.50	1.70	21.27	15.40	138
Farnsworth Lake*	9900	5/27	6.38	2.45	35.25	24.25	145
Fish Lake	8700	5/27	2.83	1.47	15.68	10.43	150
Widtsoe-Escalante #3	9500	5/25	3.08	1.80	23.34	16.40	142

VIRGIN RIVER

Duck Creek R.S.	8560	5/28	1.77	2.60	26.92	25.00	108
Webster Flat	9200	5/27	3.96	3.00	33.93	27.00	126

SOUTHEASTERN UTAH DRAINAGES

Buckboard Flat	9000	5/28	4.20	2.60	25.55	26.50	96
Camp Jackson	8600	5/28	3.75	2.05	21.45	20.95	102
LaSal Mountain(upper)	9600	6/2	4.15	2.50	24.05	25.20	95

(1) Data supplied by U.S. Forest Service. (2) Data supplied by U.S. Weather Bureau. a - all values estimated except those where symbol "a" occurs. *Adjacent drainage.

SOIL MOISTURE

STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
		DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
NAME	ELEVATION						

JULY 1, 1964

Beaver Crk-Skunk Crk.	7150	60	30.3	6/30	24.4	- -	- -
Ben Lomond(lower)	5850	60	26.5	6/30	17.6	- -	- -
Daniels-Strawberry Smt.	8000	54	31.0	7/1	22.1	- -	- -
Dry Bread Pond	8230	54	18.0	6/30	15.1	- -	- -
Dutchman R. S.	7560	36	13.3	7/2	9.4	- -	- -
Garden City Smt.	7600	66	35.5	6/30	21.7	- -	- -
Klondike Narrows	7400	54	17.2	6/30	14.4	- -	- -
Mammoth R.S.-Ctnwd.Crk.	8800	60	21.9	7/8	19.2	19.0	- -
Monte Cristo R. S.	8960	30	12.0	6/30	10.4	- -	- -
Mud Creek	8300	72	14.4	7/1	11.5	- -	- -
Timpanogos Divide	8140	54	19.5	7/2	15.2	- -	- -
Tony Grove R. S.	6250	48	18.0	6/30	13.5	- -	- -

AUGUST 1, 1964

Mammoth R.S.-Ctnwd. Crk.	8800	60	21.9	8/4	16.4	16.9	- -
--------------------------	------	----	------	-----	------	------	-----

OCTOBER 1, 1964

Mammoth R.S.-Ctnwd. Crk.	8800	60	21.9	9/30	11.2	15.7	10.0
Mud Creek	8300	72	14.4	9/28	10.7	10.9	9.0
White River #1	8600	48	16.0	9/28	6.9	10.1	7.5

NOVEMBER 1, 1964

Mammoth R.S.-Ctnwd. Crk.	8800	60	21.9	10/30	11.2	15.4	10.0
Mud Creek	8300	72	14.4	10/30	10.7	10.9	9.3
Timpanogos Divide	8140	54	19.5	11/2	11.5	12.6	- -
White River #1	8600	48	16.0	10/30	7.3	10.0	7.8

DECEMBER 1, 1964

Garden City Smt.	7600	66	26.5	11/25	11.5	- -	12.3
Mammoth R.S.-Ctnwd. Crk.	8800	60	21.9	11/27	10.6	15.1	9.2
Mud Creek	8300	72	14.4	11/30	10.7	10.9	9.3
Tony Grove R. S.	6250	48	18.0	11/25	7.2	- -	7.9
White River #1	8600	48	16.0	12/1	7.3	11.0	7.9

JANUARY 1, 1965

Ben Lomond (lower)	5850	60	26.5	12/30	17.1	- -	13.9
Mammoth R.S.-Ctnwd. Crk.	8800	60	21.9	12/29	11.1	14.6	8.3
Mud Creek	8300	72	14.4	12/29	10.7	10.5	9.3

SOIL MOISTURE

STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
		DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
NAME	ELEVATION						

FEBRUARY 1, 1965

Ben Lomond (lower)	5850	60	26.5	2/1	18.4	- -	11.8
Mammoth R.S.-Ctnwd. Crk.	8800	60	21.9	1/27	11.6	13.8	8.3
Monte Cristo R. S.	8960	30	12.0	2/4	4.2	- -	- -
Mud Creek	8300	72	14.4	1/29	10.7	10.3	9.3

MARCH 1, 1965

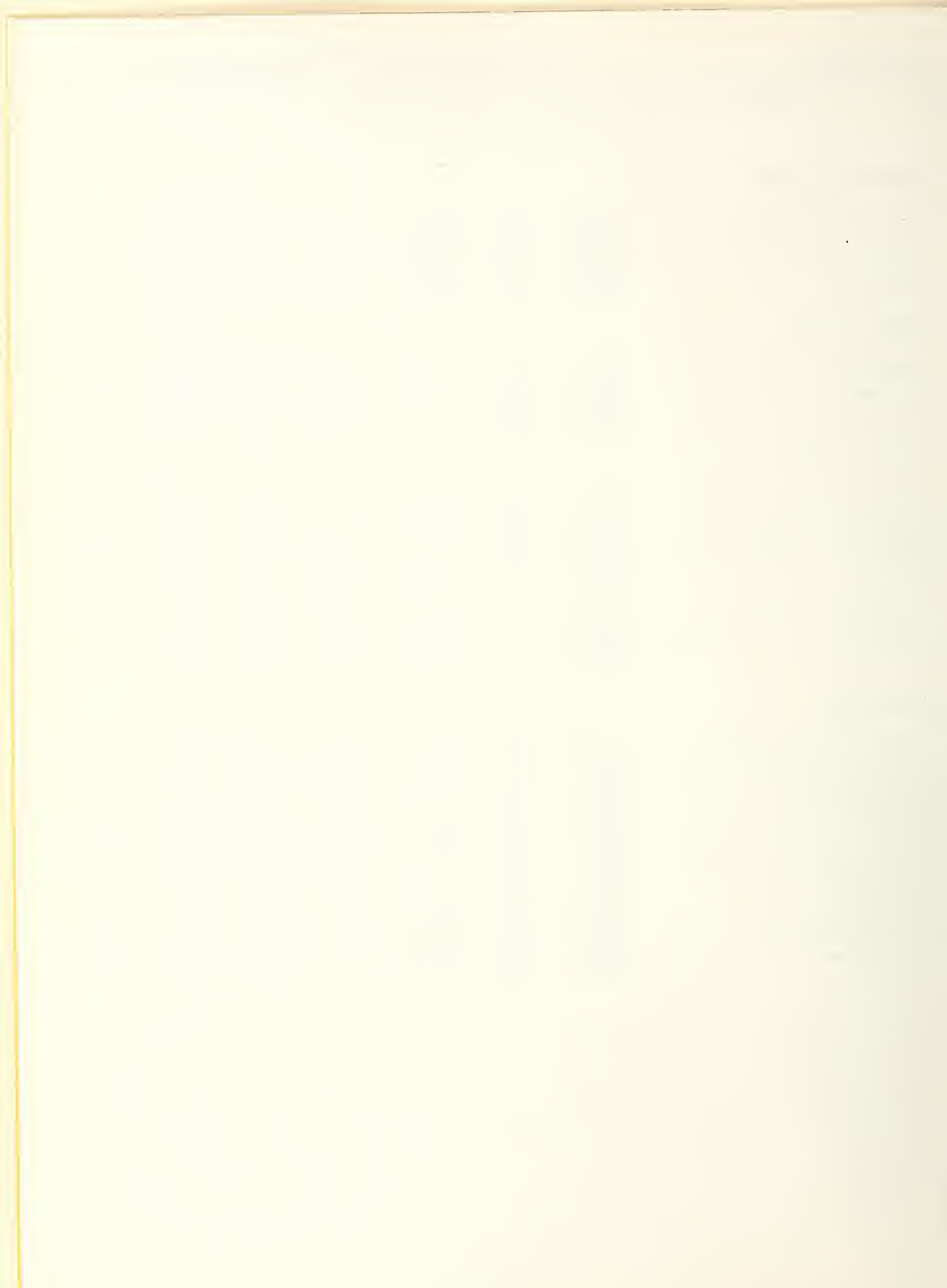
Mammoth R.S.-Ctnwd. Crk.	8800	60	21.9	2/25	11.6	13.6	8.6
Mud Creek	8300	72	14.4	2/24	10.7	10.3	9.3
White River #1	8600	48	16.0	2/25	7.3	8.0	6.1

APRIL 1, 1965

Daniels-Strawberry Smt.	8000	54	31.0	4/8	17.8	15.6	- -
Garden City Smt.	7600	66	35.5	3/31	17.2	16.3	12.5
Mammoth R.S.-Ctnwd. Crk.	8800	60	21.9	3/29	11.6	13.8	8.6
Monte Cristo R. S.	8960	30	12.0	3/25	4.5	5.3	- -
Mud Creek	8300	72	14.4	3/30	10.7	10.3	9.4
Timpanogos Divide	8140	54	19.5	3/30	13.8	16.6	- -
Tony Grove R. S.	6250	48	18.0	4/6	17.5	10.5	16.6
White River #1	8600	48	16.0	3/31	7.3	8.5	6.4

MAY 1, 1965

Beaver Crk-Skunk Crk.	7150	60	30.3	4/28	30.3	26.7	29.2
Ben Lomond(lower)	5850	60	26.5	4/30	26.4	- -	20.9
Daniels-Strawberry Smt.	8000	54	31.0	5/2	31.0	26.3	- -
Dutchman R. S.	7560	36	13.3	4/29	13.3	11.5	- -
Garden City Smt.	7600	66	35.5	5/4	22.0	25.8	14.4
Mammoth R.S.-Ctnwd. Crk.	8800	60	21.9	4/29	19.5	18.5	17.8
Monte Cristo R. S.	8960	30	12.0	4/28	10.8	5.6	- -
Mud Creek	8300	72	14.4	4/28	11.1	10.9	9.7
Timpanogos Divide	8140	54	19.5	4/29	16.9	17.1	- -
Tony Grove R. S.	6250	48	18.0	5/4	16.3	18.0	17.7
White River #1	8600	48	16.0	4/29	9.3	9.7	8.4

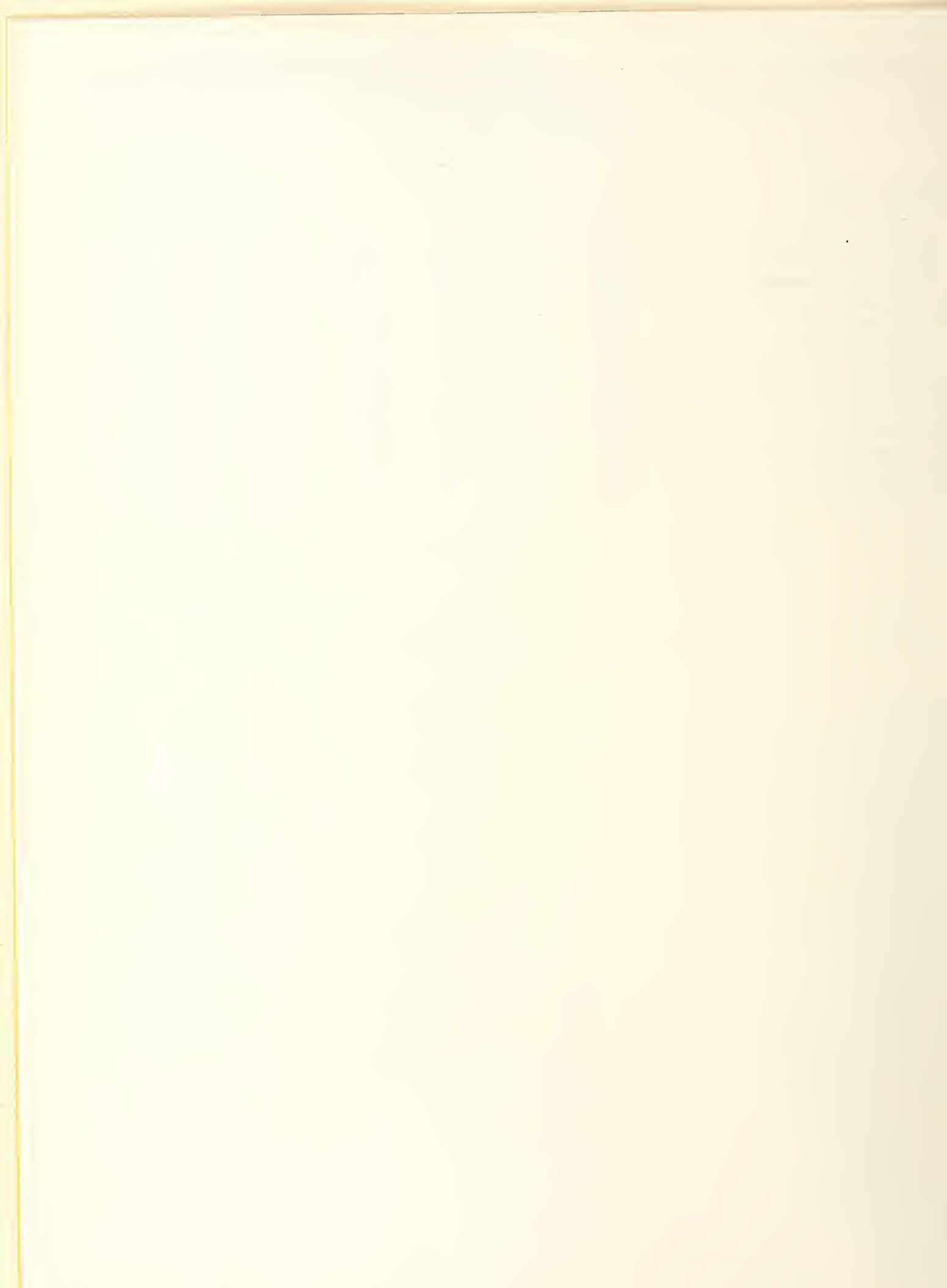


SOIL MOISTURE

STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
NAME	ELEVATION	DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO

JUNE 1, 1965

Beaver Crk-Skunk Crk.	7150	60	30.3	5/28	25.2	26.2	25.0
Ben Lomond(lower)	5850	60	26.5	5/28	17.3	17.6	- -
Daniels-Strawberry Smt.	8000	54	31.0	6/2	23.3	24.3	- -
Dry Bread Pond	8230	54	18.0	5/28	18.0	17.2	17.4
Dutchman R. S.	7560	36	13.3	6/1	11.2	9.8	- -
Garden City Smt.	7600	66	35.5	6/4	35.5	- -	25.4
Klondike Narrows	7400	54	17.2	6/4	15.5	14.8	16.1
Mammoth R.S.-Ctnwd. Crk.	8800	60	21.9	5/26	19.7	19.4	18.9
Monte Cristo R.S.	8960	30	12.0	5/28	11.6	12.0	- -
Mud Creek	8300	72	14.4	5/27	11.5	12.0	10.7
Timpanogos Divide	8140	54	19.5	6/1	14.5	17.5	- -
Tony Grove R.S.	6250	48	18.0	6/4	13.8	13.5	- -
White River #1	8600	48	16.0	5/27	14.2	15.0	12.7



Agencies Cooperating in Utah Snow Surveys

U. S. GOVERNMENT AGENCIES

U. S. Department of Agriculture
Soil Conservation Service
Forest Service
U. S. Department of Commerce
Weather Bureau
U. S. Department of Interior
Bureau of Reclamation
Geological Survey
National Park Service

STATE AGENCIES

Utah Agricultural Experiment Station
Utah Fish and Game Department
Utah State Engineer
Bear River Commissioner
Price River Commissioner
Provo River Commissioner
Sevier River Commissioners
Spanish Fork River Commissioner
Utah Lake and Jordan River Commissioner
Utah Water and Power Board

MUNICIPALITIES

Manti
Salt Lake City

ORGANIZED PUBLIC AGENCIES

Beaver River Water Users Association
Board of Canal Presidents - Jordan River
Emery Canal and Reservoir Company
Moon Lake Water Users Association
Ogden River Water Users Association
Provo River Water Users Association
Strawberry Water Users Association
Sevier River Water Users Association

PRIVATE AGENCIES

Kaiser Steel Corporation

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
FEDERAL BLDG. -- ROOM 4012
SALT LAKE CITY, UTAH 84111

OFFICIAL BUSINESS

POSTAGE AND FEES PAID
U. S. DEPARTMENT OF AGRICULTURE

FIRST CLASS MAIL

FEDERAL - STATE - PRIVATE
COOPERATIVE SNOW SURVEYS

Furnishes the basic data
necessary for forecasting
water supply for irrigation,
domestic and municipal water
supply, hydro-electric power
generation , navigation ,
mining and industry

*"The Conservation of Water begins
with the Snow Survey"*

U. S. Department of Agriculture
Library, Current Serial Record
Washington 25, D. C.

J